

AMENDMENTS TO THE ABSTRACT

Please replace the abstract in the application as filed with a replacement abstract having the following amendment. Pursuant to 37 C.F.R. § 1.72 a new abstract is submitted herewith.

-- Devices ~~A device is provided~~ for enhancing the sensitivity of a microsensor (or any other micro device) by providing on-line preconcentration. ~~A microconcentrator is~~ Microconcentrators ~~provided on a silicon substrate~~ that can be integrated with a sensor or a micromachined GC to enhance the signal to noise ratio. ~~In one embodiment the microconcentrator comprises~~ can include a miniaturized sorbent trap fabricated on a microchip. ~~In a preferred embodiment the~~ The microconcentrator is can be made on a silicon substrate so that a sensor can be integrated on the same chip. The microconcentrator is composed of at least one microchannel ~~etched in silicon. The channel is~~ lined with a microheater for in-situ heating. ~~In a most preferred embodiment preconcentration is done~~ Preconcentration may be achieved on a thin-film polymeric layer deposited above the heater in the microchannel ~~channel~~. Rapid heating by the channel heater generates a “desorption pulse” to be injected into a detector, or, a sensor. --